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*Ser. No. 10/619,294, First Response***REMARKS**

**Claim Amendments.** The claims are amended.

Claim 1 is amended as discussed at the personal interview of February 27, 2007. The Examiner has indicated that this amendment is supported at page 7, lines 24-26 of the specification. The Applicant argues below that the added feature is not disclosed by Schubach.

The claim 3 amendment is supported by the Applicant's disclosure that plural speakers, which define a generally arcuate source, are mounted on the central baffle. The source defined by the speakers and the baffle are parallel to one another.

Claim 4 is amended for clarity and the "tilted" feature is now in another claim.

In claim 6, "holes" is supported at page 7, line 13.

Claim 8 is supported in the amendment to Fig. 2, showing the center point CP, and in the specification as amended at page 8, line 21. The term "center point" was in original claim 8 and appears at page 5, line 26 and page 6, line 1 of the specification.

Method claim 18 is amended similarly to claim 1.

**New Claims.** New claim 21 is supported in new Fig. 6 and the original specification and claims (page 5, line 16 and page 12, lines 18-19). The specification is amended accordingly at the bottom of page 3 of this paper.

New claim 22 is supported in amended Fig. 2.

New claim 23 is supported in the drawing, and the specification is amended to support the language of the claim (near the bottom of page 3 of this paper).

New claims 24 and 25 are non-elected, but are entered in view of the possible allowance of claim 1. As claim 1 covers all of the disclosed species, these claims should be allowed by their dependence, if claim 1 is allowed. No consideration of these claims is required.

Independent claim 26 recites both a central baffle and a symmetry baffle, and that these two baffle are perpendicular to one another. Dependent claim 27 recites a 1.00-foot radius.

New claim 28 reinstates the subject matter removed from claim 21.

The new claims are patentable for the reasons below.

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**Election.** The Applicant confirms the election of Species 2 and claims 1-4, 6, 8, 9, 14, and 16-21.

**Drawing.** The drawing was objected to.

As to claim 4, the "tilted" feature is now illustrated in new Fig. 6. No new matter is entered. The figure is schematic and is described as such.

As to claim 9, Fig. 2 is amended to show the center point. The Examiner can use a compass to verify that the indicated point is a center point of the arc.

As to claim 21, the speakers in the original drawing are all shown at the same, non-tilted, angle. However, the Applicant has amended claim 21 to recited "tilted" without "all." As noted above, new Fig. 6 shows a tilted speaker. New claim 28 depends from claim 21 and recites "all."

§ 112. Claims 4 and 21 were rejected under §112, second paragraph. Claim 4 is amended in view of the Examiner's remarks to recite "the surface of the central baffle." If the Examiner prefers "a surface of the central baffle," such a change is authorized.

§ 102. The claims were rejected under §102 over Schupbach '826. This rejection is respectfully traversed.

**Claim 1.** This rejection is traversed on the grounds that the reference does not disclose the feature of amended claim 1, "*wherein  $r$  is greater than 1.00 feet.*" Schupbach teaches that the maximum separation between speakers, which is shown in the drawing as dimension  $a$ , should be 1.82 feet. The Examiner is invited to consider the Applicant's explanation below:

(1) Schupbach is concerned with stereophonic sound: "The present invention has for aim the realization of a monolithic stereophonic baffle ... [and] has for its object a monolithic stereophonic baffle" (col. 1, lines 32-40). See also col. 1, lines 12, explaining that "Particularly these monolithic baffles enable an excellent localization of the sound by the listeners, that is a stereophonic restitution of the sounds."

(2) Schupbach states that the ears are only sensitive to the direction of stereophonic sound at frequencies above 300 Hz. Schupbach states, "it is only for the zone ... 300 Hz 5 kHz ... which the person listening is capable of localizing from where the sounds come" (col. 2, lines 36-39).

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(3) Schupbach also says (col. 2, lines 60-64) that "to enable stereophonic listening coming near to the real listening conditions, it is necessary [to use] frequencies comprised between 300 Hz and 4 HKz."

(4) Schupbach sets up pairs of speakers, each pair corresponding to a respective frequency (col. 3, lines 34-40). The two speakers of the pair for the lowest frequency, 300 Hz, is "separated by a distance corresponding to the half wave length of a frequency of 300 Hz" (col. 3, line 41) which is the distance *a* in Fig. 4; for higher frequencies of 450, 650, 950, and 2000 Hz, the speaker pairs are separated by progressively-reduced distances *b*, *c*, *d*, and *e* (col. 3, lines 40-46).

(5) At Schupbach's lowest frequency of 300 Hz, a half wavelength is 1.82 feet, which is calculated as follows: the wavelength is the speed of sound, 1090 ft/s, divided by 300 cycles/s, which yields a quotient of 3.63 ft/cycle (the wavelength). Half of that is 1.82 feet, which is Schupbach's half wavelength at 300 Hz. Therefore, in Schupbach's Fig. 13 the greatest distance between speakers is no more than 1.82 feet, which would correspond to a radius of less than a foot in the Applicant's speaker (assuming that Schupbach were to anticipate in other ways, which is not admitted). Thus, Schupbach fails to disclose the Applicant's claimed minimum radius of 1.00 feet.

(6) The same maximum dimension of 1.82 feet is also true for the embodiment of Figs. 11-12 (see col. 5, lines 12-17); and in particular, it is also true for applied Fig. 13 (see col. 5, lines 26-36).

**Claim 8.** Claim 8 recites that the generally arcuate source of wind describes an arc of the radius *r* from a single center point.

Schupbach discloses (col. 1, line 39) that its object is "transducers disposed along a first line [and] a second group of transducers disposed along a second line, forming an angle with the first line." The two lines of speakers are provided in keeping with Schupbach's theory of stereophonic sound.

The applied figure, Fig. 13, shows "groups of loud-speakers ... located on the baffle[s] along curves" (Schupbach col. 5, line 37). The baffles are 39 and 40 (col. 5, line 30). The

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Examiner is invited to note that Schupbach uses the plural "curves" rather than singular "curve", and that these two curves do not form a single arc from a single center. They cannot form a single arc, for two reasons: one, the baffles 39 and 40 are not coplanar; and two, the center points of the two arcs do not coincide. There is not a "single center point" as the Applicant claims.

The Applicant submit the marked-up photocopy of Fig. 13 shown at the interview, which shows that in Schupbach's Fig. 13 there are two centers, one for each group of three speakers.

**Claim 23.** Claim 23 recites a  $1/n$  arc, where  $n$  is an integer. Schupbach does not disclose an arc which is an integer fraction of a full circle. The reason is that Schupbach's baffles 39 and 40 are inclined to both the floor and each other, and therefore their inside lower corners (adjoining corners at the floor) do not form right angles; they are acute angles. (Two surfaces with right angles, such as two 3-by-5 cards, can only intersect in a vertical line when their edges intersect. Conversely, if the intersection is not vertical, the corners do not form right angles.)

Furthermore, the center of the arc lies beyond the corner, so that the arc described by the center point and the three speakers of either baffle 39 or 40 is even more acute than the angle at the corner. Therefore, the arc described by the three speakers is an arc that is less than ninety degrees ( $1/4$  of a full circle). As Schupbach does not mention anything about angles or centers, the angular measure of the arc is arbitrary, and it cannot be taken as anticipating a smaller fractional arc, such as  $1/5$  of a full circle,  $1/6$  of a full circle, etc.

From the above, the entire structure shown in Fig. 13 cannot form a straight angle of 180 degrees ( $1/2$  of a full circle) because its two parts do not add up to 180 degrees. Therefore, Schupbach again does not anticipate claim 8.

**Claim 26.** Claim 26 recites "the symmetry baffle being generally perpendicular to the central baffle," but Schupbach does not disclose this feature. Schupbach's baffle is "inclined toward the rear" (Schupbach at col. 5, line 27) and therefore, if the floor is taken as a symmetry baffle (not admitted), then the floor is not perpendicular to the front face 39 or 40, which is the element most analogous to the Applicant's central baffle. Therefore, claim 26 is not anticipated.

Claim 8 also further distinguishes by this feature.

**Claim 27.** This claim depends from claim 26 and recites the 1.00-ft minimum radius.

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For the reasons above, allowance is requested.

Respectfully submitted,

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*I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571-273-8300) on March 15, 2007.*

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